



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,185	09/23/2003	Justin Won	STL11321	2611

7590 05/26/2006  
David K. Lucente  
Seagate Technology LLC  
Intellectual Property- COL2LGL  
389 Disc Drive  
Longmont, CO 80503

EXAMINER
----------

OLSON, JASON C

ART UNIT	PAPER NUMBER
----------	--------------

2627

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/669,185		WON ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Jason C. Olson		2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 1965.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) 8-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-7, 13 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 14-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-7, 13, 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Szita (US 6,785,084).

Regarding claim 13, Szita teaches a storage medium having at least one recording surface (see figure 1, item 108) that includes position information (see col. 8, ln. 66-67 and figure 3, item 300); a transducer associated with the one recording surface (see figure 1, item 118), wherein a position error signal is generatable when the position information is read by the transducer (see col. 9, ln. 1-15); a moveable assembly upon which the transducer is mounted (see col. 7, ln. 39-42 and figure 110), wherein a range of mobility of the moveable assembly allows the transducer to be positioned as necessary to allow the transducer to follow a path on the recording surface (see col. 7, ln. 39-52); and control circuitry adapted to estimate repeatable runout by performing actions that include: reading position error signals of the transducer (see col. 9, ln. 10-15) for non-consecutive revolutions to obtain position error signal data (see col. 9, ln. 28-36); and combining the position error signal data to obtain an estimate of repeatable runout for the transducer (see col. 8, ln. 59-65 and col. 10, ln. 35-46).

Regarding claim 17, Szita teaches recording the estimate of repeatable runout for the transducer for use in repeatable runout compensation (see col. 8, ln. 55-59).

Regarding claim 18, Szita teaches the estimate of repeatable runout for the transducer is recorded on at least one of the recording surfaces (see col. 8, ln. 55-59).

Regarding claim 19, Szita teaches the estimate of repeatable runout for the first transducer is recorded in a memory (see col. 8, ln. 55-59).

Regarding claim 20, Szita teaches the control circuitry includes a microprocessor (see col. 10, ln. 50-52 and col. 11, ln. 15-16; It is clear that the servo controller in the control system is a microprocessor because servo control is calculation intensive and requires processing of large amounts of data).

Regarding claim 21: Claim 21 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed above.

Regarding claims 1 and 5-7: method claims 1 and 5-7 are drawn to the method of using the corresponding apparatus claimed in claims 13 and 17-19. Therefore method claims 1 and 5-7 correspond to apparatus claims 13 and 17-19 are rejected for the same reasons of anticipation as used above.

#### ***Allowable Subject Matter***

Claims 2-4 and 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The claims are allowable over the prior art of record because

Art Unit: 2627

the prior art of record fails to teach alone or in combination reading a position error signal of another transducer for at least one additional revolution of the storage medium wherein at least one additional revolution of the storage medium takes place between the non-consecutive revolutions of the storage medium; the estimate of repeatable runout for the transducer is obtained by combining the position error signal data additional position error signal data for the transducer; the position error signal data are combined by averaging.

### ***Response to Arguments***

Applicant's arguments, see Pre-Brief Conference request, pages 1-5, filed 02/6/2006, with respect to the rejection(s) of claim(s) 1-21 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Szita. Claims 1, 5-7, 13, 17-19, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Szita. Claim 20 is rejected under 35 U.S.C 103(a) as being unpatentable over Szita. Claims 1, 5-7, 13, 17-21 stand rejected while claims 2-4 and 14-16 are objected to for being dependent upon a rejected base claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C. Olson whose telephone number is (571)272-7560. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

Art Unit: 2627

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571)272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCO

May 18, 2006



WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER